

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	20	antibody near4 (both or dual) near3 (coat or immobil? or deposit)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:46
L2	20	l1	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:43
L3	21	antibody near4 second near3 (coat or immobil? or deposit)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:46
L4	21	antibody near4 second near3 (coat or immobil? or deposit)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:51
L5	82	first same second same antibody same (immobil? or coat or deposit?) same (plate or microtiter or solid or microwell or microarray)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:53
L6	71	I5 and @py<"2004"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:57
L7	56	I5 and (antibody same bound)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:54
L8	19	I5 and (first near2 antibody near27 second near2 antibody)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 14:26
L9	0	AMER5 same antibody	USPAT; EPO	OR	ON	2005/01/18 14:26
L10	0	AMER5	USPAT; EPO	OR	ON	2005/01/18 14:27
L11	1	AMER5	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 14:48
L12	1	("20020090662").PN.	US-PGPUB; USPAT; EPO	OR	OFF	2005/01/18 16:07
L13	133	ECD near5 antibody	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2005/01/18 14:55

L14	6	l13 same her2	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2005/01/18 15:09
L15	2	WO-9014357-\$.did.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2005/01/18 15:00
L16	1	("5518887").PN.	USPAT; EPO	OR	OFF	2005/01/18 15:10
L17	1	("4803154").PN.	USPAT; EPO	OR	OFF	2005/01/18 15:10
L18	2	("20020090662").PN.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2005/01/18 16:07
L19	778	(435/973,962).CCLS.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2005/01/18 16:07
L20	1	l19 and PSA and interferen?	USPAT; EPO	OR	OFF	2005/01/18 16:17
L21	21	l19 and PSA	USPAT; EPO	OR	OFF	2005/01/18 16:10
L22	10	l21 and (second near2 antibody)	USPAT; EPO	OR	OFF	2005/01/18 18:03
L23	71	l19 and (antibody same interfer?)	USPAT; EPO	OR	OFF	2005/01/18 16:17
L24	29	l19 and (antibody near6 interfer?)	USPAT; EPO	OR	OFF	2005/01/18 17:00
L25	0	("60224396").PN.	USPAT; EPO	OR	OFF	2005/01/18 17:45
L26	0	("60224396").PN.	USPAT; EPO	OR	OFF	2005/01/18 17:45
L27	1	("4803154").PN.	USPAT; EPO	OR	OFF	2005/01/18 17:45
L28	1	("5518887").PN.	USPAT; EPO	OR	OFF	2005/01/18 18:03

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	20	antibody near4 (both or dual) near3 (coat or immobil? or deposit)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:46
L2	20	l1	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:43
L3	21	antibody near4 second near3 (coat or immobil? or deposit)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:46
L4	21	antibody near4 second near3 (coat or immobil? or deposit)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:51
L5	82	first same second same antibody same (immobil? or coat or deposit?) same (plate or microtiter or solid or microwell or microarray)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:53
L6	71	I5 and @py<"2004"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:57
L7	56	I5 and (antibody same bound)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:54
L8	19	I5 and (first near2 antibody near27 second near2 antibody)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2005/01/18 13:58

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PASSWORD:

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SESSION RESUMED IN FILE 'AGRICOLA, BIOTECHNO, CONFSCI, HEALSAFE, IMSDRUGCONF,  
LIFESCI, MEDICONF, PASCAL' AT 14:32:05 ON 18 JAN 2005  
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FULL ESTIMATED COST	37.37	37.58

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Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files  
that are available. If you have requested multiple files, you can  
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ENTER A FILE NAME OR (IGNORE):ignore

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	37.37	37.58

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=> (first(2A)antibody(20A)second(2A)antibody) and (coated or coating or  
immobilizing or immobilized or deposited) and (microplate or plate or microarray or  
microtiter)

L73	0	FILE AGRICOLA
L74	16	FILE BIOTECHNO
L75	0	FILE CONFSCI
L76	0	FILE HEALSAFE
L77	0	FILE IMSDRUGCONF
L78	4	FILE LIFESCI
L79	0	FILE MEDICONF
L80	4	FILE PASCAL

TOTAL FOR ALL FILES

L81	24	(FIRST(2A) ANTIBODY(20A) SECOND(2A) ANTIBODY) AND (COATED OR COATING OR IMMOBILIZING OR IMMOBILIZED OR DEPOSITED) AND (MICROPLATE OR PLATE OR MICROARRAY OR MICROTITER)
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=> dup rem

ENTER L# LIST OR (END):l81

DUPLICATE IS NOT AVAILABLE IN 'IMSDRUGCONF, MEDICONF'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE

PROCESSING COMPLETED FOR L81

L82	18	DUP REM L81 (6 DUPLICATES REMOVED)
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=> d l82 ibib abs total

L82	ANSWER 1 OF 18	BIOTECHNO	COPYRIGHT 2005 Elsevier Science B.V. on STN
ACCESSION NUMBER:	1999:29252544	BIOTECHNO	
TITLE:	A 1-hour enzyme-linked immunosorbent assay for quantitation of acrolein- and hydroxynonenal-modified proteins by epitope-bound casein matrix method		
AUTHOR:	Satoh K.; Yamada S.; Koike Y.; Igarashi Y.; Toyokuni S.; Kumano T.; Takahata T.; Hayakari M.; Tsuchida S.; Uchida K.		
CORPORATE SOURCE:	K. Satoh, Second Dept. of Biochemistry, Hirosaki University, School of Medicine, 5 Zaifu-Cho, Hirosaki, Hirosaki 036, Japan. E-mail: kisatoh@mail.cc.hirosaki-u.ac.jp		
SOURCE:	Analytical Biochemistry, (01 JUN 1999), 270/2 (323-328), 25 reference(s) CODEN: ANBCA2 ISSN: 0003-2697		
DOCUMENT TYPE:	Journal; Article		
COUNTRY:	United States		
LANGUAGE:	English		
SUMMARY LANGUAGE:	English		
AN	1999:29252544	BIOTECHNO	
AB	A simple and rapid enzyme-linked immunosorbent assay (ELISA) method for quantitation of acrolein and 4-hydroxy-2-nonenal (HNE)-modified proteins was developed. <b>Microtiter plate</b> wells were precoated and blocked simultaneously with epitope-bound bovine caseins as matrix proteins, and aldehyde-modified proteins were quantitated by a competition assay with a monoclonal antibody specific for acrolein-modified lysine or HNE-modified histidine epitopes. Minimal reaction times required for the <b>coating/blocking; first</b>		

monoclonal **antibody** and the peroxidase-conjugated **second antibody** binding steps were 3, 3, and 7 min, respectively, the former two steps being found to be or akin to diffusion-rate-limiting reactions. The convenient ELISA should find an application for analyses of the intricate processes involved in oxidative stress and carcinogenic insult. The epitope-attachment methodology may also be advantageous for the quantitation of various other biologically important haptenic molecules.

L82 ANSWER 2 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN

ACCESSION NUMBER: 1995:25356360 BIOTECHNO  
TITLE: The measurement of progesterone in serum by a non-competitive idiometric assay  
AUTHOR: Barnard G.; Osher J.; Lichter S.; Gayer B.; De Boever J.; Limor R.; Ayalon D.; Kohen F.  
CORPORATE SOURCE: Department of Hormone Research, Weizmann Institute of Science, Rehovot 76100, Israel.  
SOURCE: Steroids, (1995), 60/12 (824-829)  
CODEN: STEDAM ISSN: 0039-128X  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United States  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AN 1995:25356360 BIOTECHNO

AB A novel non-competitive idiometric time-resolved fluoroimmunoassay for the determination of serum progesterone was developed, based on the use of two types of anti-idiotypic antibody that recognize different epitopes within the hypervariable region of the primary antiprogestosterone **antibody**. The **first** anti-idiotypic, the betatype, competes with progesterone for an epitope of the primary antiprogestosterone **antibody** at the binding site. The **second** anti-idiotypic, the alphas type, binds to the antiprogestosterone antibody in the presence of progesterone, but does not bind to the betatype antiprogestosterone complex due to epitope proximity. In the present configuration, the biotinylated alphas type was captured onto anti-biotin IgG which was **immobilized** on **microtiter** wells. Reaction mixtures containing europium- labeled antiprogestosterone antibody complexed sequentially with progesterone in standards or serum samples and with the betatype anti-idiotypic antibody were then reacted with the **immobilized** alphas type anti-idiotypic antibody. After 30 min of incubation, the fluorescence of europium is measured by time-resolved fluorescence and is proportional to the concentration of progesterone over the range 0-320 nmol/mL. The method demonstrates good sensitivity, precision, and comparability with a direct competitive radioimmunoassay. The idiometric assay for progesterone is suitable for dipstick technology and biosensors.

L82 ANSWER 3 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN

ACCESSION NUMBER: 1995:26018330 BIOTECHNO  
TITLE: Non-competitive time-resolved immunofluorometric assays for determination of human insulin-like growth factor I and II  
AUTHOR: Frystyk J.; Dinesen B.; Orskov H.  
CORPORATE SOURCE: Inst. Experimental Clinical Research, Aarhus Kommunehospital, Norrebrogade 44, DK-8000 Aarhus C, Denmark.  
SOURCE: Growth Regulation, (1995), 5/4 (169-176)  
CODEN: GREGEP ISSN: 0956-523X  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United Kingdom  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AN 1995:26018330 BIOTECHNO

AB We present sensitive non-competitive time-resolved immunofluorometric

assays (TR-IFMAs) for IGF-I and IGF-II based on monoclonal antibodies. Assays were performed in microtest-plate wells: the **first antibodies** were **immobilized** on the solid matrix, the **second** labelled with the chelate derivative of Europium (EU.sup.3.sup.+). The obtained specificities and sensitivities were high: IGF-I and IGF-II cross-reactivity in heterologous assay was below 0.0002%. The detection limits were 0.0025 µg/l and 0.010 µg/l for the IGF-I and IGF-II assay, respectively. The operating range included upwards: 2.5 µg/l (IGF-I) and 10.0 µg/l (IGF-II). This implies that all clinically relevant serum concentrations could be measured in one final dilution (1:1066 for IGF-I and 1:2132 for IGF-II) after acid ethanol extraction. The high sample dilution with buffer made further neutralization or evaporation of serum acid ethanol extracts unnecessary. Interassay variation of the assays was below 10%.

L82 ANSWER 4 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN  
DUPLICATE

ACCESSION NUMBER: 1995:26024062 BIOTECHNO  
TITLE: Direct double antibody sandwich immunoassay of mucin M.sub.1 epitopes in human mucus secreting pancreatic cell lines  
AUTHOR: Montserrat C.; Hollande E.; Guy-Crotte O.; Figarella C.  
CORPORATE SOURCE: Gr. de Recherche Glandes Exocrines, Faculte de Medecine, 27 Boulevard Jean Moulin, F-13385 Marseille Cedex 05, France.  
SOURCE: Clinica Chimica Acta, (1995), 243/1 (43-52)  
CODEN: CCATAR ISSN: 0009-8981  
DOCUMENT TYPE: Journal; Article  
COUNTRY: Netherlands  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AN 1995:26024062 BIOTECHNO  
AB A direct sandwich enzyme immunoassay using two monoclonal antibodies was developed in order to quantify mucin M.sub.1 antigens produced by two pancreatic adenocarcinoma cell lines: CAPAN-1 and CFPAC-1. As a solid phase, the wells of a **microtiter plate** were **coated** with a **first monoclonal antibody**, 1-13 M.sub.1 and the biotinylated monoclonal conjugate 9-13 M.sub.1 was used as the **second antibody**. The assay was optimized with streptavidin-peroxidase. The detection limit of the assay is 1.6 ng/ml. This ELISA is highly specific, sensitive, reproducible and quickly performed. It will permit the comparison of mucin exocytosis by the two cell lines in response to secretagogue agents and may help in the study of the pathogenesis of mucus hypersecretion such as cystic fibrosis.

L82 ANSWER 5 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN  
DUPLICATE

ACCESSION NUMBER: 1994:24167228 BIOTECHNO  
TITLE: A new method for detecting  $\beta$ 1,4-galactosyltransferase activity in sera of cancer patients  
AUTHOR: Taki T.; Nishiwaki S.; Handa N.; Hattori N.; Handa S.  
CORPORATE SOURCE: Department of Biochemistry, School of Medicine, Tokyo Medical and Dental University, Yushima 1-5-45, Bunkyo-ku, Tokyo 113, Japan.  
SOURCE: Analytical Biochemistry, (1994), 219/1 (104-108)  
CODEN: ANBCA2 ISSN: 0003-2697  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United States  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
AN 1994:24167228 BIOTECHNO

AB A new method for assaying the activity of the enzyme that catalyzes the formation of a cancer-associated glycolipid, paragloboside (nLc.sub.4Cer), from lactotriaosyl-ceramide (Lc.sub.3Cer) and UDP-galactose has been developed that is based on a time-resolved fluoroimmunoassay (TRFIA) with a Europium (Eu)-chelate-labeled antibody. The substrate, Lc.sub.3Cer, **immobilized on a microtiter plate**, was incubated with UDP-galactose, MnCl.sub.2, Triton CF-54, and the enzyme. The content of the incubation product, nLc.sub.4Cer, was determined by the TRFIA with anti-nLc.sub.4Cer monoclonal antibody H-11 as the **first antibody** and Eu-labeled anti-mouse IgM **antibody** as the **second one**. The lower limit of detection of nLc.sub.4Cer was estimated to be 0.2 pmol. This method was used to detect the galactosyltransferase activity in sera from patients with colorectal cancer or benign colorectal adenomas and from healthy subjects of a reference sample group. The reference interval was 0-0.25 pmol/25 µl serum/2 h. Activity was significantly greater in patients with colorectal cancer than in those with colorectal benign adenoma (P < 0.05) and the subjects of the reference sample group (P < 0.01).

L82 ANSWER 6 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN  
DUPLICATE

ACCESSION NUMBER: 1992:22221675 BIOTECHNO  
TITLE: Improved enzyme immunosorbent assay for mouse prolactin using penicillinase as label  
AUTHOR: Tomita Y.; Engelman R.W.; Bauer-Sardina I.; Day N.K.; Good R.A.  
CORPORATE SOURCE: Animal Science Division, Faculty of Agriculture, Miyazaki University, Nishi 1-1, Miyazaki 889-21, United States.  
SOURCE: Journal of Immunological Methods, (1992), 151/1-2 (269-275)  
CODEN: JIMMBG ISSN: 0022-1759  
DOCUMENT TYPE: Journal; Article  
COUNTRY: Netherlands  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AN 1992:22221675 BIOTECHNO

AB Enzyme immunosorbent assay (EIA) for mouse prolactin was established by modifying a method originally developed for human prolactin by Shrivastav et al. This simple, sensitive, rapid, and reproducible assay utilizes penicillinase as the labeling enzyme, rabbit anti-mouse prolactin antibody (Ab) and goat anti-rabbit Ig Ab as the **first and second antibodies**. Prolactin reference preparations and enzyme-conjugated prolactin were mixed with the first Ab and incubated for 0.5 h at 4°C (24-48 h for serum samples). Then, the sample mixture was transferred to the wells of **microtiter plate coated** with the second Ab. After being kept at room temperature for 2 h, the **plate** was washed and filled with substrate solution (penicillin V). Absorbance at 620 nm was measured with an ELISA reader to quantitate the amount of conjugated prolactin bound to the second Ab. The prolactin levels obtained by this assay exhibited good correlation with those measured by radioimmunoassay (RIA) ( $y = 0.95x + 9.14$ ,  $r = 0.943$ ), and the sensitivity of EIA was equivalent to that of RIA (1.7 ng/ml). The CVs of intra-assay and inter-assay by EIA for mouse serum samples ranged comparably to those by RIA.

L82 ANSWER 7 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN

ACCESSION NUMBER: 1991:21137981 BIOTECHNO  
TITLE: An enzyme immunoassay for rat prolactin: Application to the determination of plasma levels  
AUTHOR: Duhau L.; Grassi J.; Grouselle D.; Enjalbert A.; Grognet J.-M.  
CORPORATE SOURCE: Section de Pharmacologie et d'Immunologie, Departement



de Biologie, CEN/Saclay, 91191 - GIF sur Yvette Cedex, France.

SOURCE: Journal of Immunoassay, (1991), 12/2 (233-250)  
CODEN: JOUIDK ISSN: 0197-1522

DOCUMENT TYPE: Journal; Article

COUNTRY: United States

LANGUAGE: English

SUMMARY LANGUAGE: English

AN 1991:21137981 BIOTECHNO

AB Pure acetylcholinesterase (EC 3.1.1.7) from *Electrophorus electricus* has been covalently coupled to rat prolactin using the heterobifunctional reagent: N-succinimidyl-4 (N-maleimidomethyl) cyclohexane-1-carboxylate (SMCC). This conjugate was used as a tracer in a competitive enzyme immunoassay using a rabbit antiserum, raised against rat prolactin, as **first antibody**. The assay was performed in 96-well **microtiter plates coated** with a mouse monoclonal anti-rabbit immunoglobulin **antibody**. This **second antibody** solid phase ensured separation of bound and free moieties of the tracer during the specific immunoreaction. The total reaction volume was 150  $\mu$ l. Each component (tracer, antiserum and standard) was added in a volume of 50  $\mu$ l. The sensitivity of the assay was good since calculation indicated a detection threshold of 25 pg (0.5 ng/ml) and a B/Bo 50 % value of 220 pg (4.4 ng/ml). Intra-assay variation was better than 10 % over a wide range (135 to 2500 pg) with an optimum of 4 % at 300 pg. The inter-assay coefficient of variation was less than 15 % for rat plasma samples in the concentration range of 8 to 1000 ng/ml. The good parallelism observed between the standard curve and sample dilution curves, and recovery experiments, indicated that direct assay is possible. This was confirmed by molecular sieve fractionation of plasma samples. The reliability of the assay was confirmed by good correlation with conventional radioimmunoassay ( $r = 0.996$ , slope = 0.978).

L82 ANSWER 8 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN

ACCESSION NUMBER: 1991:22179500 BIOTECHNO

TITLE: Elisa incubation times can be reduced by 2.45-GHz microwaves

AUTHOR: Van Dorp R.; Kok P.G.; Marani E.; Boon M.E.; Kok L.P.

CORPORATE SOURCE: Department of Physiology, University of Leiden, P O Box 9604, 2300 RC Leiden, Netherlands.

SOURCE: Journal of Clinical and Laboratory Immunology, (1991), 34/2 (87-96)

CODEN: JLIMDJ ISSN: 0141-2760

DOCUMENT TYPE: Journal; Article

COUNTRY: United Kingdom

LANGUAGE: English

SUMMARY LANGUAGE: English

AN 1991:22179500 BIOTECHNO

AB The ELISA (Enzyme Linked Immuno Sorbent Assay) technique is widely applied in the field of immunology. The use of this technique implies several incubation periods, often requiring more than one hour each. Microwave irradiation is known to be very useful in accelerating different kinds of processes. This knowledge has led to the present study in which it is proved that 2.45-GHz microwaves are able to reduce ELISA incubation times. This time reduction of 50% or more concerns each of the four incubation steps of the specific indirect ELISA which is used to determine the amount of antibodies in NF90-hybridoma cell culture supernatants. These incubation steps involve the **coating** of the **microtiter plate**, the incubation with BSA against non-specific binding, and the incubations with the **first** and **second antibody**. Combinations of more microwave-influenced steps in one ELISA save a considerable amount of time. When in addition air is blown through the incubation fluid during microwaving, the extinction values are almost the same as those of

conventionally performed ELISAs. Thus, a good match of power setting and irradiation time results in a total incubation time reduction from 5.5 hours to 2 hours in this particular ELISA. Carefully monitoring the temperature of the incubation fluids during irradiation with the use of a fiberoptic thermometer appeared to be of crucial importance in the development of an optimal procedure.

L82 ANSWER 9 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN  
ACCESSION NUMBER: 1989:19088404 BIOTECHNO  
TITLE: Immunoenzymometric assay for the heart specific glycogen phosphorylase BB in human serum using monoclonal antibodies  
AUTHOR: Hofmann U.; Rabitzsch G.; Loster K.; Handschack W.; Noll F.; Krause E.-G.  
CORPORATE SOURCE: Central Institute for Cardiovascular Research, Academy of Sciences, Berlin-Buch, DDR 1115, Germany.  
SOURCE: Biomedica Biochimica Acta, (1989), 48/2-3 (S132-S136)  
CODEN: BBIADT ISSN: 0232-766X  
DOCUMENT TYPE: Journal; Article  
COUNTRY: Germany, Federal Republic of  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AN 1989:19088404 BIOTECHNO  
AB An enzyme-linked immunosorbent assay for the determination of the human glycogen phosphorylase isoenzyme BB (GP BB) using two murine monoclonal antibodies was developed. A series of hybridoma clones producing monoclonal antibodies to GP BB were obtained by the standard lymphocyte hybridoma technique. Two of the selected clones synthesizing monoclonal antibodies, which recognize different epitopes, were employed for the immunoenzymometric assay. The **first monoclonal antibody** was **immobilized on microtiter plates** and the bound glycogen phosphorylase BB was detected with the **second monoclonal antibody** conjugated with horseradish peroxidase. This assay enables a specific and sensitive measurement of GP BB in the range of 0.5-150 ng/ml phosphate-buffered saline containing 0.5% bovine serum albumin in less than 3 hours. The lower limit in human serum amounts about 3 ng/ml. Preliminary data obtained with human sera from patients after aorto-coronary artery bypass surgery are demonstrated.

L82 ANSWER 10 OF 18 LIFESCI COPYRIGHT 2005 CSA on STN  
ACCESSION NUMBER: 89:70454 LIFESCI  
TITLE: Sandwich enzyme immunoassay for murine IL-3.  
AUTHOR: Ziltener, H.J.; Clark-Lewis, I.; McDonald, S.L.  
CORPORATE SOURCE: Biomed. Res. Cent., 2222 Health Sci. Mall, Univ. British Columbia, Vancouver, B.C. V6T 1W5, Canada  
SOURCE: CYTOKINE., (1989) vol. 1, no. 1, pp. 56-61.  
DOCUMENT TYPE: Journal  
FILE SEGMENT: F  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
AB A reproducible, sensitive immunoassay for murine interleukin-3 (IL-3) has been developed using two preparations of polyclonal antipeptide antibodies. Rabbits were immunized with the N-terminal peptide 1-29 (IL-3) coupled to KLH and the antibodies were affinity purified on **immobilized peptide 1-29 (IL-3)**. This antibody preparation showed good reactivity with native IL-3, and was used to coat polyvinyl **microtiter** trays. IL-3 captured by this **first antibody** was detected by the addition of anti-IL-3 serum ( **second antibody**) raised in sheep against synthetic full length IL-3 (1-140).

L82 ANSWER 11 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN  
ACCESSION NUMBER: 1988:19017265 BIOTECHNO  
TITLE: An improved solid-phase enzyme and luminescent

immunoassay system for steroid hormones and digoxin  
 AUTHOR: Hubl W.; Daxenbichler G.; Meissner D.; Thiele H.J.  
 CORPORATE SOURCE: Institute of Clinical Chemistry and Laboratory  
 Diagnostics of Dresden-Friedrichstadt Hospital,  
 DDR-8010 Dresden, Germany.  
 SOURCE: Clinical Chemistry, (1988), 34/12 (2521-2523)  
 CODEN: CLCHAU ISSN: 0009-9147  
 DOCUMENT TYPE: Journal; Article  
 COUNTRY: United States  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English  
 AN 1988:19017265 BIOTECHNO  
 AB A uniform solid-phase system has been developed for enzyme (ELISA) or  
 luminescent (LIA) immunoassays for steroids. These assays were improved  
 by (a) irradiating **microtiter plates** or polystyrene  
 tubes before **coating** with antibody or Protein A, (b)  
**coating** the plastic trays with nonspecific anti-gamma-globulin or  
 Protein A instead of the steroid-specific **first**  
**antibody**, and (c) partial denaturation of the **second**  
**antibody** before **coating** the **plates** or tubes  
 with it. Specific antibodies were raised against cortisol, aldosterone,  
 17-hydroxyprogesterone, and digoxin. Horseradish peroxidase was used as  
 label for the ELISA and aminoethylisoluminol for the LIA. In comparison  
 with the first (specific) antibody **coating** method we observed  
 some advantages: From 10- to 33-fold lower concentrations of first  
 antibodies were necessary to bind the same amount of steroids; precision  
 was better (CV, 3.8-7.5% vs 6.9-15.5%). The high sensitivity of these  
 assays (0.5-2.0 pg per tube for the steroids) also allows determination  
 of the steroids and digoxin in plasma and saliva.

L82 ANSWER 12 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN  
 DUPLICATE  
 ACCESSION NUMBER: 1988:18093764 BIOTECHNO  
 TITLE: A rapid and simple ELISA for the determination of  
 duplicate monoclonal antibodies during epitope  
 analysis of antigens and its application to the study  
 of Cl.horizbr.-INH  
 AUTHOR: Alsenz J.; Loos M.  
 CORPORATE SOURCE: Institute of Medical Microbiology, Johannes Gutenberg  
 University of Mainz, 6500 Mainz, Germany.  
 SOURCE: Journal of Immunological Methods, (1988), 109/1  
 (75-84)  
 CODEN: JIMMBG ISSN: 0022-1759  
 DOCUMENT TYPE: Journal; Article  
 COUNTRY: Netherlands  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English  
 AN 1988:18093764 BIOTECHNO  
 AB A rapid and simple ELISA has been developed for identifying the  
 specificities of two monoclonal antibodies recognizing either similar or  
 distinct epitope(s) of an antigen. The method utilizes **microtiter**  
**plates coated** with one of the monoclonal antibodies  
 either by direct adsorption of the purified antibody to the plastic or by  
 immobilization of the antibody from ascites or hybridoma supernatants via  
**immobilized** polyclonal anti-mouse immunoglobulin antibodies.  
 After preincubation of the antigen with the **second** monoclonal  
**antibody**, the mixture is added to the surface-**immobilized**  
**first antibody**. The amount of antigen bound to the  
**first antibody** is subsequently measured by rabbit  
 polyclonal antibodies to the antigen and peroxidase-conjugated  
 anti-rabbit immunoglobulin antibodies. Binding of antigen to the  
**first antibody** is only observed when the **second**  
 monoclonal **antibody** binds to a distinct epitope. The major  
 advantages of this procedure are its simplicity, rapidity and

independence of radioisotopes. Using this method a library of monoclonal antibodies against human Cl.horizbr.-INH has been tested and several duplicate monoclonal antibodies have been identified. Furthermore, the above analytical procedure was capable of detecting conformational changes of the Cl.horizbr.-INH molecule induced either by binding of a monoclonal antibody to Cl.horizbr.-INH or by enzymatic cleavage of Cl.horizbr.-INH.

L82 ANSWER 13 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN  
ACCESSION NUMBER: 1986:16014540 BIOTECHNO  
TITLE: Enzyme-linked immunosorbent assay for adherence of bacteria to animal cells  
AUTHOR: Ofek I.; Courtney H.S.; Schifferli D.M.; Beachey E.H.  
CORPORATE SOURCE: Department of Human Microbiology, Sackler School of Medicine, Tel Aviv, Israel.  
SOURCE: Journal of Clinical Microbiology, (1986), 24/4 (512-516)  
CODEN: JCMIDW  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United States  
LANGUAGE: English

AN 1986:16014540 BIOTECHNO  
AB Epithelial cells scraped from human oral mucosa and from pig intestines were **immobilized** onto the flat bottom surfaces of **microtiter plates** to study the adherence of various bacterial species to host cells. Bacterial adherence was quantitated either by an enzyme-linked immunosorbent assay technique with specific antibacterial serum as the **first antibody** followed by peroxidase-conjugated **second antibody** or by using biotinylated bacteria and avidin-peroxidase as the detecting agent. Unlabeled E. coli and purified E. coli 987P fimbriae inhibited the adherence of biotinylated E. coli to **immobilized** enterocytes. The adherence of a mannose-sensitive strain of E. coli to **immobilized** oral epithelial cells was inhibited by mannose derivatives. The adherence of fimbriated E. coli 987P to **immobilized** enterocytes was approximately four times higher than the adherence of a nonfimbriated variant of the same strain. The adherence of Streptococcus pyogenes to oral cells was detected in the range of 10 to 150 bacteria per cell and was inhibited by lipoteichoic acid and albumin. The data suggest that the putative receptors which bind bacteria on the **immobilized** cells retain a functional form similar to that of native cells in suspension. The proposed adherence assay is easy to perform, allows the detection of specific adherence of test bacteria, and provides objective quantitation of adherence with a sensitivity of 10 bacteria per cell. Most importantly, the assay allows the testing of many variables in the same day.

L82 ANSWER 14 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN  
ACCESSION NUMBER: 1985:16237728 BIOTECHNO  
TITLE: Plant virus detection using a new form of indirect ELISA  
AUTHOR: Edwards M.L.; Cooper J.I.  
CORPORATE SOURCE: NERC Institute of Virology, Oxford OX1 3SR, United Kingdom.  
SOURCE: Journal of Virological Methods, (1985), 11/4 (309-319)  
CODEN: JVMEDH  
DOCUMENT TYPE: Journal; Article  
COUNTRY: Netherlands  
LANGUAGE: English

AN 1985:16237728 BIOTECHNO  
AB A novel form of indirect enzyme-linked immunosorbent assay (ELISA) has been devised for the detection of viruses in plants. The method uses protein A in two applications to sandwich **antibody-antigen-antibody** layers. The **first** applied layer of protein A

prepares the **plate** for the **coating antibody** layer. The **second** layer of protein A is conjugated to the enzyme and detects the second antibody layer. The orientation of the IgG induced in the **coating** layer of antibody prevents later unwanted reaction with the conjugated protein A. Using seven antisera, protein A sandwich ELISA (PAS-ELISA) detected homologous virus isolates in standard dilutions of infected plant homogenates at A.sub.4.sub.0.sub.5 values which were at least one absorbance unit greater than those of healthy controls. The PAS-ELISA method was more sensitive than the direct double antibody sandwich form of ELISA (DAS-ELISA), e.g. not only were A.sub.4.sub.0.sub.5 values for homologous reactions greater in PAS-ELISA but also an antiserum to a birch isolate of cherry leaf roll virus detected four related isolates with the new method against only one with DAS-ELISA. However, dilution end points for the homologous virus were about the same in both methods. In a practical application, PAS-ELISA detected prune dwarf virus in 18-36% of tested *Prunus avium* seeds.

L82 ANSWER 15 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN  
DUPLICATE

ACCESSION NUMBER: 1984:14043279 BIOTECHNO  
TITLE: Solid-phase assay for the detection of low-abundance enzymes, and antibodies to enzymes in immune reactions, using acid sphingomyelinase as a model  
AUTHOR: Freeman S.J.; Davidson D.J.; Callahan J.W.  
CORPORATE SOURCE: Division of Neuroscience, Hospital for Sick Children, Toronto, Ont. M5G 1X8, Canada.  
SOURCE: Analytical Biochemistry, (1984), 141/1 (248-252)  
CODEN: ANBCA2  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United States  
LANGUAGE: English

AN 1984:14043279 BIOTECHNO  
AB The development of a solid-phase immunosorbent assay, suitable for use with enzyme antigens, is described. Acid sphingomyelinase and a mouse monoclonal anti-sphingomyelinase antibody have been used to determine optimal conditions for the assay. The assay involves immobilization of a **second antibody** (anti-mouse IgG) in the wells of a polyvinyl **microtiter plate**. Soluble immune complexes of **first antibody** (monoclonal anti-sphingomyelinase) and antigen (sphingomyelinase), incubated in separate vials, are then reacted in the anti-mouse IgG-**coated** assay wells, and the extent of the cross-reaction between antibody and antigen is measured by direct assay of enzyme retained in the well. A necessary condition of the assay is that antibody must not inhibit enzyme activity, which makes it especially suitable for monoclonal antibodies. The assay finds useful application in hybridoma fluid screening, equivalence point determination, and demonstration of cross-reacting enzyme from various tissue sources.

L82 ANSWER 16 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN  
DUPLICATE

ACCESSION NUMBER: 1983:13023980 BIOTECHNO  
TITLE: An enzyme-linked immunosorbent assay for lactose synthase (galactosyltransferase) in serum and its application as a tumor marker in ovarian carcinoma  
AUTHOR: Verdon B.; Berger E.G.; Salchli S.; et al.  
CORPORATE SOURCE: Institute of Medical Chemistry, University of Berne, CH-3000 Berne 9, Switzerland.  
SOURCE: Clinical Chemistry, (1983), 29/11 (1928-1933)  
CODEN: CLCHAU  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United States  
LANGUAGE: English

AN 1983:13023980 BIOTECHNO

AB This assay for lactose synthase (galactosyltransferase, EC 2.4.1.22) in serum involves two sequential incubations: serially diluted standard or sample antigen is reacted with a fixed amount of antibody; unbound antibody is then adsorbed to wells of antigen-coated **microtiter plates** and determined by a **second antibody** directed against the **first antibody** and coupled to phosphatase. The standard curve is linear for galactosyltransferase concentrations of 10 to 600 µg/L. the within-assay CV of a serum sample was 9.3% (SD 4.1%), the between-assay was 3.8 (SD 2.4%). Serum galactosyltransferase concentrations computed from three different dilutions yielded CVs of 6.5% (SD 5.7%, n = 14). We evaluated the method's accuracy by recovery analysis and by comparing enzyme activity in serum with that of purified galactosyltransferase from human milk. The normal reference interval, as estimated from data on 27 healthy blood donors, was 60-436 µg/L (mean 224, SD 101 µg/L). We applied the assay to samples of serum from ovarian carcinoma patients grouped according to tumor burden. We also determined galactosyltransferase in ascites fluid and found these values useful for diagnosis, whereas determinations in serum may serve mainly for patient monitoring.

L82 ANSWER 17 OF 18 PASCAL COPYRIGHT 2005 INIST-CNRS. ALL RIGHTS RESERVED.  
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ACCESSION NUMBER: 1983-0355821 PASCAL

TITLE (IN ENGLISH): Luminescence catalyst immunoassay of  
β.sub.2-microglobulin with haemin as a chemically  
amplifiable label

TITLE (IN FRENCH): Dosage de la β.sub.2-microglobuline par methode  
immunologique avec catalyseur de luminescence, en  
utilisant l'hemine comme marqueur chimiquement  
amplifiable

AUTHOR: IKARIYAMA Y.; SUZUKI S.; AIZAWA M.

CORPORATE SOURCE: Tokyo inst. technology, Midori-ku Yokohama 227, Japan

SOURCE: Enzyme and microbial technology, (1983), 5(3),  
215-218, 14 refs.

ISSN: 0141-0229

DOCUMENT TYPE: Journal

BIBLIOGRAPHIC LEVEL: Analytic

COUNTRY: United Kingdom

LANGUAGE: English

AVAILABILITY: CNRS-18233

AN 1983-0355821 PASCAL

AB Luminescence catalyst immunoassay, a nonradioactive and nonenzymatic immunoassay, has been applied to the determination of β.sub.2-microglobulin (β.sub.2-MG). The method is characterized by high sensitivity and simple handling, since the analytical method employs a catalytically amplifiable label and solid-phase sandwich technique, respectively. In the **first stage**, an **antibody-immobilized plate** is reacted with the analyte (β.sub.2-MG). In the **second stage**, the bound β.sub.2-MG undergoes successive binding with haemin-labelled antibody. In the last stage, the **plate** is placed in the luminol-H.sub.2O.sub.2 system to generate luminescence. A calibration curve with a β.sub.2-MG concentration at the midpoint of 100 ng ml.sup.-.sup.1 was obtained. The 10 and 90% response levels in the curve are 10 and 1000 ng ml.sup.-.sup.1

L82 ANSWER 18 OF 18 BIOTECHNO COPYRIGHT 2005 Elsevier Science B.V. on STN

ACCESSION NUMBER: 1980:10067047 BIOTECHNO

TITLE: Comparison of solid phase test systems for  
demonstrating antibodies against hepatitis A virus  
(anti-HAV) of the IgM-class

AUTHOR: Roggendorf M.; Froesner G.G.; Deinhardt F.; Scheid R.

CORPORATE SOURCE: Max von Pettenkofer-Inst. Hyg. Med. Mikrobiol., Univ.  
8000 Munich 2, Germany.  
SOURCE: Journal of Medical Virology, (1980), 5/1 (47-62)  
CODEN: JMVIDB  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United States  
LANGUAGE: English

AN 1980:10067047 BIOTECHNO

AB Three methods were compared for determining anti-HAV of the IgM class. In the first method flat-bottomed **microtiter plates** **coated** consecutively with anti-HAV of the IgG class and HAAg were incubated with patient serum and, after washing, peroxidase conjugated anti- $\mu$  was added. After subsequent incubation with substrate the enzymatic reaction was stopped and the optic density was measured. In the **second** method the solid phase was **coated first** with **antibodies** to IgM and after incubation with patient serum and subsequent incubations with HAAg and <sup>125</sup>I anti-HAV of the IgG class radioactivity was counted. These two methods were compared with reorienting sucrose gradient ultracentrifugation, an established method for demonstrating specific IgM antibodies. The persistence of IgM anti-HAV in 103 sera drawn at different times after onset of jaundice was evaluated. Sera drawn up to 30 days after onset of hepatitis A were IgM anti-HAV positive with both of the first two methods. Forty-one to 90 days after onset of illness IgM anti-HAV could be demonstrated with the first method in 47% of the patients, in 94% with the second method, and in 82% with gradient centrifugation. The second method was most sensitive and could be adjusted so that at a serum dilution of 1:10<sup>4</sup> anti-HAV IgM was detected only up to six months after infection. In contrast to the first method, nonspecific reactions caused by rheumatoid factor were not detected with the second method. During a one-year period about 15,000 sera of patients with clinical diagnoses of acute hepatitis were tested; the positive results correlated well with the clinical data, and there was no indication of nonspecific positive results.